

# Northern Hairstreak

## *(Satyrium favonius ontario)*

The broad range of the Northern hairstreak includes much of the eastern United States, but populations are often very localized with few individuals in many areas. In Kentucky, this butterfly has been found in only 12 counties and individuals are uncommon to rare. The Northern hairstreak is listed as a special concern species in Kentucky by the Kentucky State Nature Preserves Commission for two primary reasons: (1) it exists in a limited geographic area; and (2) it is believed to be rare or declining, but insufficient information exists for the assignment to the threatened or endangered status categories.

L.D. Gibson

### ***How To Recognize The Northern Hairstreak***

The Northern hairstreak (*Satyrium favonius ontario*) is a butterfly in the family Lycaenidae, which includes the harvesters, coppers, hairstreaks and blues. Adults are about 1-1.5 inches long and have small “tails” on the end of the hindwing. The underside of the hindwing is gray-brown with a narrow orange cap on a blue tail-spot and a white-edged black “W” near the inner margin. Adults lack a cell-end bar (a thin bar of color found on the outer edge of the wing cell that differs from the ground wing color) on the hindwing, a characteristic that distinguishes it from many other very similar and common hairstreaks found in Kentucky.



### ***Habitat And Biology***

The Northern hairstreak prefers a wide variety of woodland edge habitats, but is most often found in pine-oak woodlands and the edges of rich, mixed deciduous woodlands. In Kentucky, larvae feed on a variety of oaks (*Quercus* spp.), especially Blackjack oak (*Quercus marilandica*). Adults are frequently found nectaring on Dogbane (*Apocynum cannabinum*) or Farkleberry (*Vaccinium arboreum*) from mid May to late June.

### ***Why Is The Northern Hairstreak Rare?***

It is difficult to determine with certainty why the Northern hairstreak is rare in Kentucky, but the likely reason is loss of high-quality habitat. Some of the best populations known from the state occur in relatively undisturbed barren/prairie habitats exhibiting a rich diversity of native plants. The loss of these diverse natural communities through land conversion/development seems to be the most likely reason for the limited number of Northern hairstreak populations in Kentucky. Approximately 3.0 million acres were once considered prairie or barrens habitat, but approximately 98% of this habitat has been lost or heavily degraded. The life cycle of the Northern hairstreak (and butterflies in general) requires ample numbers of the preferred food plants (Blackjack oak) for larvae to feed on, as well as an abundance of nectar sources (especially Dogbane and Farkleberry) for adults. Insecticides and herbicides are harmful to many insects and may also be contributing to the decline of this species. More research is needed to determine the limiting factors, but there seems to be a correlation between rich natural communities, especially those in association with relatively undisturbed barren/prairie habitats, and the occurrence of the best Northern hairstreak populations in Kentucky.

### ***Why Should We Be Concerned About The Loss Of Species?***

Extinction is a natural process that has been occurring since long before the appearance of humans on Earth. However, the rate of extinction has greatly increased in the last few centuries. Species are becoming extinct because of loss of habitat due to air and water pollution and conversion of the landscape for other uses.

All living things are part of a complex web of life. The removal of a single species can in turn cause the loss of other species that depend upon it. Extinction diminishes the diversity and complexity of life on earth and ultimately jeopardizes the health of the human environment. Also, wild plants and animals are a storehouse of resources for food, medicines and other products.

### ***The Federal Endangered Species Act***

The Endangered Species Act of 1973 recognizes that many of our nation's valuable plant and animal resources have been lost and that other species are close to extinction. The Act provides a means to help preserve these species and their habitats for future generations.

### ***How you can help:***

- Learn about endangered species, especially those in your area.
- Protect natural areas from clearing, trash dumping, and other intensive use. Stay on designated trails in natural areas.
- If you find the Northern hairstreak, please contact the Kentucky State Nature Preserves Commission.
- Be a good land steward and participate in the protection of our environment. Avoid the unnecessary use of insecticides and herbicides.
- Maintain or restore natural communities found on your land.
- Volunteer with the Kentucky State Nature Preserves Commission



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